

# SPECIAL AUTHORIZATION TO DISCHARGE TO THE CITY OF TACOMA'S STORM DRAIN SYSTEM

In accordance with Tacoma Municipal Code Chapter 12.08.365 and subject to the conditions contained in Chapter 12.08 and in this authorization, the entity specified herein is authorized to discharge to the City of Tacoma's (TACOMA) storm drain system:

Washington State Department of Transportation (WSDOT), Neil Uhlmeyer, (360) 412-3421
Name of Responsible Company, Authorized Representative, Phone No.
7912 Martin Way, Suite E, Lacy, WA 98516
Address of Company, Street, City, State, ZIP
Kim Mueller, Assistant Project Engineer (360) 412-3422 e-mail:
Additional Contact Person, Phone number
Kim Mueller, Asst. Project Engineer (360) 412-3422 24 hr: (360) 239-9659
Construction Contact Person, Phone number, Emergency number
WSDOT
Name of Property Owner
WSDOT Lacey Project Office 7912 Martin Way, Suite E, Olympia, WA 98516
Billing address
Storm drainage manhole's #6764220 & 6750507
Address of Discharge Location, Street City

#### A. PURPOSE OF DISCHARGE:

This Special Approved Discharge (SAD) authorization will permit discharge of stormwater runoff from sites associated with construction of the the I-5/SR16 eastbound Nalley Valley project. Over the course of the project, stormwater run off within the construction area will collect in five separate ponds. From the five detention ponds, water will be pumped to one of two primary detention ponds that have chitosan water treatment systems set up to clarify the water before it is pumped to Tacoma's municipal storm drainage system. In the event of pipe failure, plugging etc., two 4000 gallon water trucks will be employed to haul water at a rate of 24,000 gallons per hour. Only treated/uncontaminated stormwater or uncontaminated groundwater meeting the permittee's Construction Stormwater NPDES permit limitations will be permitted for discharge under this Special Approved Discharge Authorization. Contaminated water generated by construction activities, such as boring slurry, must be handled separately.

Special Approved Discharge Authorization
Washington State Dept. of Transportation
Eastbound I-5/SR16 Interchange
Issued: April 27, 2011 Revision January 5, 2012
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#### B. DISCHARGE CONDITIONS:

- 1. Flow Limitations and Monitoring Requirements:
  - a. Chitosan-enhanced sand filtration water treatment systems approved by the Washington State Department of Ecology will treat turbid stormwater discharged to the City of Tacoma's storm drainage system from two (2) of the stormwater collection ponds. Clean stormwater meeting the permittee's Construction Stormwater NPDES permit can be discharged directly to the City's drainage system. Discharge rate and volume will be metered. Discharging will be on a continuous basis.
  - b. The only anticipated pollutant of concern is turbidity. Continuous monitoring for pH and turbidity will be provided as required by the State of Washington for chitosan treatment.
  - c. The rate of flow will be limited based on each discharge location. See Section C of this authorization for discharge location details.
  - d. Sampling will not be required under this permit, although Tacoma may require (or conduct) sampling to confirm the absence of pollutants.

#### 2. Reporting Requirements

- a. Continuous turbidity and pH monitoring must be maintained (via log) at the Chitosan treatment units. Failure of the system to provide adequate treatment must be reported to Environmental Services (ES) immediately.
- b. If pollutants are detected in the untreated water by color, odor, or sheen, ES must be notified immediately and discharge must cease until the pollutants are identified and it is shown that the treatment system is capable of removing them.
- c. The total volume of water discharged shall be reported to Environmental Services on an annual basis. Groundwater extracted from wells or excavations must be metered and reported separately, under WSDOT's prime contractors sanitary Special Approved Discharge permit.
- 3. Quality Limitations and Monitoring Requirements:
  - a. The chitosan treatment systems must be operated in compliance with the conditions for use of Chitosan Enhanced Sand Filtration issued by the Washington State Department of Ecology January 2007 (updated January 2009).

#### C. DISCHARGE LOCATIONS:

Receiving manholes noted below are the point of discharge to Tacoma's municipal storm drainage system from the Chitosan treatment systems.

City of Tacoma		
WSDOT Pond ID	Receiving manhole #	Max Flow rate (gpm)
Midas Pond	6764220	1500
	6750507 via	500
NV Pond	connection to line	•
	segment 6262795	

Receiving manholes noted below are the point of discharge to Tacoma's municipal storm drainage system from three of WSDOT's detention ponds that do not have Chitosan treatment stations. Only clean stormwater meeting the permittee's Construction Stormwater NPDES permit may be discharged to Tacoma's municipal storm drainage system from these ponds.

City of Tacoma			
WSDOT Pond ID	Receiving mahole	Max flow rate	gpm
Center Pond	6776583	1000	
EWN Pond	6762965	1000	}
New Pond	6762965	500	

#### D. OTHER CONDITIONS:

The Permit Holder:

- 1. Must sign and submit to Tacoma prior to discharge, a Hold Harmless Agreement provided by Tacoma.
- 2. Must pay the applicable fees and maintain payments as provided for in Tacoma Municipal Code Chapter 12.08. Flow based fees will be walved for stormwater entering collection ponds from surface water runoff and existing WSDOT storm drainage systems. Groundwater extracted from wells or excavations must be metered separately and the volume reported to TACOMA at least quarterly for billing purposes.
- 3. Must cease discharge upon ANY of the following conditions:
  - a. Violation, either suspected or detected, of any of the discharge conditions specified in B. above.
  - b. When directed to by TACOMA.

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4. Must deliver a letter to TACOMA at the office of Environmental Services Science and Engineering Division, 326 East D Street, Tacoma, 98421-1801, (FAX (253) 502-2295) within 5 calendar days of any exceedance of the discharge conditions specified in B above, explaining the limitations exceeded, the cause, the measures taken to mitigate it and to prevent reoccurrence.

#### E. PRIOR TO COMMENCEMENT OF DISCHARGE:

At least 2 business days prior to the anticipated start of discharge, Permitee must call the TACOMA representative at (253) 591-5588 to notify TACOMA of the intent to begin, and receive final discharge approval. An on-site Inspection may be performed by TACOMA staff including discharge sampling.

#### F. ENFORCEMENT:

Violations of this authorization or of TACOMA Municipal Code Chapter 12.08 will be subject to enforcement provisions of said Chapter.

ON BEHALF OF THE CITY OF TACOMA

Dated

Geoffrey M. Smyth, P.E.

Division Manager, Science and Engineering City of Tacoma / Environmental Services

The 24-hour emergency telephone number is (253) 591-5595. The regular business hours (Mon-Fri 8:00 A.M. to 4:30 P.M.) number is (253) 591-5588. FAX (253) 502-2295

#### SAD FACT SHEET

#### 1. APPLICANT INFORMATION

- A. Applicant Name: Washington State Department of Transportation
- B. Mailing Address 7912 Martin Way, Suite E, Olympia, WA 98516
- C. Facility Address <u>I5/SR 16 Eastbound Nalley Valley HOV Lane</u>
- D. Permit Contact with signatory authority Neil Uhlmeyer
  Title Project Manager
  Phone (360) 412-3421
- F. Wastewater Treatment Plant Receiving Wastewater CTP 1
- G. Stormwater Basin Thea Foss Waterway (OF 237A)

#### 2. DESCRIPTION OF OPERATION

The Washington State Department of Transportation (WSDOT) will be constructing a new HOV lane within the I-5/SR 16 Eastbound Nalley Valley area. The prime contractor for WSDOT on this project is Mowat Construction. Water(s) covered under this Special Approved Discharge Authorization (SAD) are any surface runoff from current WSDOT roadways within the project limits. WSDOT's temporary erosion and sediment control plan (TESC) specifies that five (5) detention ponds will be utilized to accept surface water(s) throughout the project limits. From the five ponds, water will be pumped/piped to two (2) primary detention ponds (Midas & MV ponds) for treatment with Chitosan in the event the water does not meet discharge limitations as specified in WSDOT's Construction Stormwater NPDES permit through the Washington State Department of Ecology. For turbidity this would be water containing less than 25 NTU's and neutral pH (6.0 to 9.0). Water(s) containing excess turbidity will be treated by the Chitosan, sand filtration system prior to discharge into the City's municipal storm drainage system via two (2) locations, manhole #6764220 and #6750507. Flow rates have been established by Environmental Services Engineering for both locations based on size of the collection system and relative slope of the system. The flow rates are (manhole #6764220) 1500 gpm and (manhole #6750507) 500 gpm. In the event of pipe failure, plugging, etc. the prime contractor will employ two (2) 4000 gallon water trucks to transport water(s) to the two primary detention ponds at a rate of 24,000 gallons/hour. This permit covers only surface water runoff from WSDOT roadways and uncontaminated groundwaters encountered during construction. All construction related water(s), i.e. concrete related slurry, wastewaters, contaminated groundwater and all other construction related waters will be regulated under Mowat Construction's sanitary SAD permit. This project is projected to last

#### SAD FACT SHEET

two and one half years. A permit renewal (annual) fee will be charged for each year of the project. The City of Tacoma has agreed to waive all flow based fees associated with this project.

#### 3. DESCRIPTION OF DISCHARGE

#### A. Pretreatment Process and Equipment

Water containing turbidity in excess of 25 NTU will be treated through one of two Chitosan sand filtration systems within the project limits. These Chitosan treatment systems are located at the Midas and MV pond locations. Water will be routed to these two primary detention ponds via 6" pumps and HDPE pipe. It is anticipated that surface water that meets WSDOT's Construction NPDES permit limitations (25 NTU or less) will be discharged directly to the City's municipal storm drainage system without Chitosan treatment.

#### 4. RATIONALE FOR WASTEWATER DISCHARGE LIMITATIONS

Discharge limitations set by this Special Approved Discharge Authorization are based primarily on WSDOT's Construction NPDES permit limitations. This Authorization allows for the discharge of 25 NTU's or less to the City's municipal storm drainage system from any location.

#### 5. MONITORING REQUIREMENTS

The permittee will monitor for turbidity and pH on a daily basis while discharging to the City's municipal storm drainage system. Turbidity and pH readings will be kept in logs onsite for inspector review. Permittee will also monitor for unusual color, odor and sheen.

#### 6. MONITORING LOCATIONS

The permittee will monitor discharges at each point of discharge to the City's municipal storm drainage system.

#### 7. REPORTING REQUIREMENTS

The permittee will submit turbidity and pH readings to the City on a quarterly basis. In the event that unusual color, odor or sheen is found in the discharge, the permittee must immediately cease discharging and notify the City at (253) 591-5588 between the hours of 8:00 to 4:30 and (253) 428-2721 after hours.

#### 6. SPECIAL REQUIREMENTS

- A. Accidental spill prevention and countermeasure plan (ASPP).

  The permittee will maintain a copy of the ASPP on site and have it available for inspector review.
- B. Other N/A



#### City of Tacoma Public Works Department

February 11, 2011

Carrie M. Berry WSDOT Tacoma-Pierce Co. HOV Program PO Box 47376 Olympia, WA 98504-7376

Dear Ms. Berry:

On November 15, 2010, the City of Tacoma received application from WA State Dept. of Transportation (WSDOT) for Special Authorization to Discharge (SAD) treated stormwater from the I-5/SR 16 Eastbound Nalley Valley (EBNV) project. Construction is anticipated to begin in April of 2011. We understand WSDOT would like to have environmental permits in place when construction begins. However, we prefer to issue this SAD after the stormwater treatment contractor is chosen. Then, the chosen treatment system will be described in the Fact Sheet and the contractor will be named in the permit.

Unless there is a significant difference between the stormwater treatment system used by the Westbound I-5-SR 16 Nalley Valley (WBNV) project and the system chosen for the EBNV project, we anticipate the stormwater SAD issued for the EBNV project will be identical to the SAD issued to WSDOT for the WBNV project. The only anticipated change is that maximum flow rates for discharge to City of Tacoma manhole numbers 6762965 (EWN Pond), 6764220 (MIDAS pond), and 6776583 (CENTER pond) will be increased to the maximum flow rates requested in your November 2010 SAD application.

Please contact Linda Reiter at 253-502-2159, or <a href="mailto:lireiter@cityoftacoma.org">lreiter@cityoftacoma.org</a>, when the stormwater treatment contract is awarded for the EBNV project so the SAD can be finalized and issued before construction begins. If you have questions or concerns regarding this letter, please contact Ms Reiter for assistance.

Sincerely,

Michael L. Kennedy

Assistant Division Manager

**Environmental Compliance Support** 

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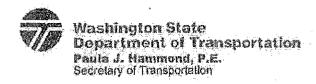
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File: G/EnviroCompilance/SAD/2011 SADs/WSDOT -- EBNV Project/WSDOT 020211 letter

RECEIVED

FEB 1 4 2011

OR HOV Office



November 12, 2010

Olympic Region
Tacoma/Pierce County HOV Office
724 Outroe St. SE, Suite 206
P.O. Box 47376
Olympia, WA 98504-7376
360-709-8130
360-709-8131 Fax
TTY: 1-800-833-6388
www.wadot.wa.gov

Linda Reiter
Source Control Representative
City of Tacoma Environmental Compliance Support
326 East D Street
Tacoma, WA 98421

SUBJECT:

Special Authorization to Discharge to Storm Drain Request

Tacoma/Pierce County HOV Program I-5/SR 16 Eastbound Nalley Valley HOV

Dear Ms. Reiter:

The Washington State Department of Transportation requests Special Authorization to Discharge (SAD) to the City of Tacoma storm drain. This application is submitted for approval to discharge stormwater during the construction of the Eastbound Nalley Valley HOV project, anticipated to begin in July 2011. The attached SAD Application includes the following:

- Fee Check #983287
- Hold Harmless Agreement
- Site Maps
- Example Ecology requirements for chitosan treatment systems
- Copy of WBNV HOV Application and April 2009 letter

This application also includes a request to waive quantity fees associated with the proposed discharge into municipal storm drain. Though discharge will likely be treated by chitosan enhanced sand filtration systems to meet Washington State Water Quality Standards, the source of discharge is surface runoff. The Westbound Nalley Valley HOV fee exemption letter is attached for reference, reporting that treated surface runoff is not a discharge of "non-stormwater" subject to quantity fees under TMC 12.08,365 B.3.C.

Thank you for your consideration of this application. If you have any questions or need additional information, please contact Jena Jordan at 360-709-8122.

(FOR CALLE BORNE)

Sincerely.

Carrie M. Berry

Environmental Manager

WSDOT Tacoma/Pierce County HOV Program

ce: Joe Perez, Project Engineer, w/o attachments

#### D. REQUIRED PERMITS - Specify permit type and number, and effective dates

The Contractor is responsible to notify and receive approval from Ecology for use of CESF systems. This includes following the Ecology General Use Level Designations and providing an onsite CESF operator. (Example attached.) The Contractor must provide WSDOT a copy of this approval prior to use of CESF treatment systems.

Ecology NPDES - Construction General Permit: WAR-124644, effective 10/5/2010

WSDOT has received coverage under the Ecology NPDES Construction Stormwater General Permit. Onsite water quality monitoring and reporting will be conducted by WSDOT according to Ecology NPDES permit standards. The Contractor will be required to provide an ESC Lead to implement the TESC plan, with current State certification in Construction Site Erosion and Sediment Control.

### E. OTHER RELEVANT INFORMATION: N/A

I have personally examined and am familiar with the information submitted in this document and attachments (if applicable). Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.

November 12, 2010		
Date		
Carrie M. Berry		
Environmental Manager		
WSDOT - Tacoma/Pierce County HOV	7 Program	
Name of Applicant/Company	<del></del>	٠
Carrie M. Berry	WSDOT	
Authorized Representative (print)	Property Owner (print)	
(rocener	re Boney) N/A	
Signature of Authorized Representative	Signature of Property Owner	

Return to: City of Tacoma Environmental Services Engineering Division



### APPLICATION FOR

## SPECIAL AUTHORIZATION TO DISCHARGE TO THE CITY OF TACOMA

T .16.	Anticki i i Artiite	1-37 SIX 10 1388000	ind Nalley Valley HOV (EBNV)		
AP	PLICANT(S)				
1.	Name:	Carrie M. Berry	360-709-8147		
	Company:	WSDOT - Tacoma	/Pierce County HOV Program		
	Address:	724 Quince St SE.	Suite 206 (PO Box 47376)		
	**************************************	Olympia, WA 9850	04-7376		
	Relationship	Relationship to project: Environmental Manager  Additional Contact Person: Joe Perez - Project Engineer			
	Additional Co				
	Business Pho	ne Number: <u>360-70</u>	9-8158 E-Mail: perezj@wsdot.wa.gov		
2,			9-8158 E-Mail: perezj@wsdot.wa.gov		
2,	Contact Person	Construction: Nea	ul Uhlmeyer, WSDOT – Lacey/Project		
2,	Contact Person	Construction: New 7912 Martin Way,	d Uhlmeyer, WSDOT – Lacey Project Suite E		
2.	Contact Person	- Construction: New 7912 Martin Way, Olympia, WA 985	ul Uhlmeyer, WSDOT – Lacey/Project		
<b>:2</b> ;	Contact Person Address: Relationship	Construction: New 7912 Martin Way, Olympia, WA 985 to project: Pro	ul Uhlmeyer, WSDOT – Lacey Project Suite E 16 ject Engineer		
<b>'2</b> ,	Contact Person Address: Relationship Business Pho	- Construction: Nea 7912 Martin Way, Olympia, WA 985 to project: Pro ne Number: 360	d Uhlmeyer, WSDOT – Lacey/Project / Suite E		
<b>12.</b>	Contact Person Address:  Relationship Business Pho Emergency (2)	Construction: New 7912 Martin Way, Olympia, WA 985 to project: Pro ne Number: 360	ul Uhlmeyer, WSDOT – Lacey Project ( Suite E  16  iect Engineer -412-3421		

4.	Billing Nan	ne: WSDOT - Lacey Project Office	ا پريندهني در د
	Address:	7912 Martin Way, Suite E	12.1.1.2.2.2.
		Olympia, WA 98516	•

5. Proposed Discharge Locations:

Please see Site Map B. The discharge points into the City of Tacoma system are labeled with associated Structure IDs. All locations flow into the Tacoma storm system discharging to the Thea Foss Waterway.

Discharge to the WSDOT drainage system ultimately flows into the following City of Tacoma structures:

- MH 6762965
- MH 6764220
- MH 6776583
- Connection to COT 72" line SAP ID 6262795 & flows to MH 6750507

Due to construction staging, runoff may be routed through temporary conveyance lines not depicted on Site Map B. The points of discharge into the Tacoma municipal system will remain the same.

#### C. DESCRIBE THE PROPOSED DISCHARGE.

1. Please provide detailed information and attach supporting documents:
The proposed EBNV HOV Project is the second of three projects proposed to replace and improve the Nalley Valley viaduct and I-5/SR 16 interchange. The EBNV project will reconstruct eastbound SR 16 across the Nalley Valley and prepare for future HOV lanes and ramps from I-5 to SR 16. Proposed improvements include removal of the existing Nalley Valley viaduct, construction of a new eastbound bridge over the Nalley Valley viaduct, completion of the Sprague Avenue interchange construction, and replacement of ramps from eastbound SR 16 to I-5.

The first project, Westbound Nalley Valley, is currently under construction and permitted for discharge into storm drain by SAD authorization, dated January 26, 2009.

The proposed EBNV project will maintain a similar treatment and discharge strategy as the previous project. The EBNV project will utilize four of the stormwater ponds built for the Westbound Nalley Valley project and one additional pond constructed during this project. A portion of the onsite stormwater will be piped to the ponds directly from existing stormwater collection and conveyance structures, while some stormwater will be routed to ponds by pumping from construction areas or temporary sumps. Each pond will be equipped with a chitosan-enhanced sand filtration (CESF) system to treat runoff for both turbidity and pH, as necessary. The CESF treatment systems will be operated by the Contractor and according to conditions provided by the Department of Ecology, including a requirement to continuously monitor pH and turbidity in the treated effluent. An example of Ecology CESF requirements is attached.

The source of discharge to Tacoma municipal storm drain is surface water runoff.

The only anticipated pollutants are pH and turbidity from runoff that may be exposed to construction areas. If other pollutants are detected in the untreated water by color, odor, or sheen, discharge will stop immediately. This water will be contained to prevent any spread of contamination until additional testing can be completed by WSDOT.

Contaminated water generated by construction activities, such as shaft slurry or concrete washout, must be contained and handled separately. It is the responsibility of the Contractor to apply for additional permits for discharge into sanitary sewer.

Groundwater is not anticipated to be encountered or discharged during the EBNV Project.

\*WSDOT requests an exemption for the quantity fee required under TMC 12.08.365 B.3.C. The source of construction storm water discharge associated with the Eastbound Nalley Valley project is surface runoff. Though a portion of this discharge will likely be treated to meet Washington State Water Quality Standards for turbidity or pH, the source is surface runoff. WSDOT proposes that freated surface runoff is not a discharge of "non-stormwater", as was determined during the first Nalley Valley project in 2009. Please see attached letter, dated April 3, 2009.

#### 2. Expected Volume (gal):

The potential storm water runoff was calculated conservatively using mean annual precipitation, construction duration of 30 months, and 76 acre drainage area. Estimated volume for EBNV is 150,000,000 gallons total.

#### 3. Method of Discharge:

Pumped from CESF treatment system.

4. Method of Discharge Measurement and location of meter, if applicable: Each CESF system will be equipped with a flow metering device.

#### 5. Flow Rate:

The maximum flow rate at each discharge point is shown below.

Pond Name (Site Map B)	Max. Flow Rate (Gallons per Minute)	City of Tacoma Receiving MH
EWN	1,000	6762965
NEW	500	6762965
MIDAS	1,500	6764220
NV	500	6750507
CENTER	1,000	6776583

#### 6. Time and Duration of Discharge:

Specific times and durations are dependent on rain events and contractor schedule. Estimated project schedule: 7/2011 - 12/2013.

#### HOLD HARMLESS AGREEMENT

In consideration of the CITY OF TACOMA's (herein referred to as TACOMA) consent to discharge construction stormwater from the WASHINGTON STATE DEPARTMENT OF TRANSPORTATION's (herein referred to as WSDOT) right-of-way into the TACOMA storm sewer system, during the interstate 5 / State Route 16 Eastbound Nailey Valley - HOV project;

We, WSDOT, its authorized agents and employees, will protect, save and hold harmless TACOMA, its successors or assigns, from all claims, actions, costs, damages, or expenses of any nature whatsoever by reason of the acts or omissions of WSDOT, its assigns, agents, contractors, licensees, invitees, employees or any person whomsoever, arising out of or in connection with any acts or activities authorized by this Permit or conducted by WSDOT. WSDOT further agrees to defend TACOMA in any litigation, including payment of any costs or attorney's fees, for any claims or actions commenced. This obligation shall not include such claims, costs, damages, or expenses which may be caused by the sole negligence of TACOMA, its successors or assigns; that are subject to this paragraph.

SIGNED this 4 day of MONEY RER, 20 10

By Sighedure

John E. Wywonos

Print Name

STATE OF WASHINGTON)

:55

County of Thurston)

On this day personally appeared before me <u>STEPHANIE GROUT</u>, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that <u>he</u> signed the same as \_\_\_\_ free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal this 4 day of November 2010.

HO7AA)

NOTARY PUBLIC in and for the State of Washington, residing at MY COMMISSION EXPIRES: 9/9/2014